

Abstract of the Disclosure

A heat processing apparatus for heating a mask substrate is disclosed. A mask substrate on which a coating solution has been coated is placed on a heating plate that heats the substrate. A frame member is disposed on the heating plate so that the frame member faces a side surface of the mask substrate placed on the heating plate when the frame member is attached to the heating plate and that a clearance is formed between the frame member and the heating plate when the frame member is attached to the heating plate. The frame member suppresses heat radiated from the side surface of the substrate. As a result, the temperature uniformity of the surface of the substrate can be improved. In addition, since the clearance is formed between the frame member and the heating plate, particles do not accumulate in the region. Thus, adhesion of particles to the substrate can be suppressed.